

Fw: Inside EPA article

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Subject: Inside EPA article

FYI

(See attached file: EPA Radiation Exposure Fears Drive Push Against New Phosphate Mines.doc)

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EPA Radiation Exposure Fears Drive Push Against New Phosphate Mines

EPA concerns that as many as 40,000 people living on former phosphate mining lands in central Florida are being exposed to dangerous levels of radiation -- along with concerns that the cost of cleaning up the sites will be enormous -- are helping environmentalists push the agency and the Army Corps of Engineers to assess potential environmental impacts before permitting new mining proposals.

EPA's concerns about contaminated indoor air in the central Florida homes, which *Inside EPA* reported in January, may also bolster the legal efforts of residents allegedly exposed to drinking water contaminated by phosphate mining activities to obtain financial compensation from liable parties, sources familiar with the issue say.

It remains unclear, however, whether and how a potentially precedent-setting policy dispute between EPA and Florida state officials that has stalled efforts to address the residential exposures for decades will be resolved. Florida officials' belief that EPA cleanup standards are overly conservative remains central to the dispute, sources say ([see related story](#)).

Activists, however, are citing EPA's concerns about dangerous exposures on the former phosphate mining lands near Lakeland, FL -- along with the expected cost of cleaning up the sites -- in their efforts to ensure that the potential environmental impacts of new mines are adequately assessed before EPA and the Army Corps permit such projects.

In a March 19 letter to Acting EPA Region IV Administrator Stan Meiburg and officials with the Army Corps and other federal agencies, a coalition of environmental groups cite *Inside EPA's* January article about the exposure concerns and demand the officials complete full environmental impact statements (EIS) before they permit any new mines.

The article "reported that in some residential areas built on former sites people are exposed to up to 500 millirems per year of radiation, substantially more than the 15 mrem level [EPA] has historically considered safe," the activists note. "At the 500 mrem level about 1 in 40 people would be expected to develop cancer, a risk 250 times greater than the 1 in 10,000 cancer risk scenario normally applied at Superfund sites."

This "alarming information is important not only because the risk must be considered in any decision to allow further mining, but also because the potential cleanup cost is huge," say the activists, which include the Sierra Club, Protect Our Watersheds and the Clean Water Network of Florida.

Former Mining Sites

Many former mining sites were once operated by corporate predecessors to Mosaic Fertilizer LLC, which is now proposing new mines in other areas, the activists say. "If Mosaic has no clear ability to cover the cleanup costs for its mining operations, those of its predecessor, or those it currently owns, it should not be allowed to mine," the activists argue.

"According to the article, the current cleanup cost is as much as \$11 billion dollars," the activists add, a figure that is nearly half of the up to \$24 billion in future hardrock mining cleanup costs EPA faces across the country and more than nine times the agency's annual Superfund budget. "There can be no question that the continuing creation of this level of risk and cost requires and EIS," the activists say.

Activists are also pursuing the issue through litigation. In one lawsuit Earthjustice has filed in federal court on behalf of the Sierra Club, People for Protecting Peace River and others, they argue the Army Corps' issuance of one mining permit to Mosaic under Section 404 of the Clean Water Act (CWA) violates the CWA, National Environmental Policy Act and the Administrative Procedure Act.

The activists argue the Corps decision to conduct only a supplemental environmental assessment (EA) before issuing the permit rather than prepare a full EIS was improper. Although the supplemental EA reached a finding of “no significant impact,” the activists argue that the permit in question “authorizes the destruction of 480 acres of high-quality wetlands in the headwaters of Horse Creek, a major tributary of the Peace River.”

The Army Corps and Mosaic are rejecting the activists arguments, however, and in a March 1 motions urge the U.S. District Court for the Middle District of Florida to dismiss the case without a trial. The permit “was issued after a process that took over three years in which the Corps extensively analyzed the environmental impacts --not once, but twice--and concluded that Mosaic’s mining operations would not have a significant environmental impact,” the company argues.

EPA has expressed support for preparing EISs for new phosphate mines in some instances. In a March 10 letter EPA tells the Corps the agency “has long advocated that an Area Wide EIS be developed” for the “‘Bone Valley’ phosphate mining region of central Florida, which is predominately located within the Peace River Watershed.”

In support of conducting such an EIS, EPA says it “has substantial concerns with the cumulative impacts and the downstream effects on the [Charlotte Harbor National Estuary] resulting from proposed 404 permit actions for mining in the ‘Bone Valley.’” In addition, the “Peace River supplies potable water directly or through purchase to approximately 700,000 citizens, and any water quality deterioration due to mining activities may compromise public drinking water supplies and adversely impact public health,” EPA says.

Although the EPA radiation exposure concerns are related to central Florida residents breathing contaminated indoor air in homes built on former phosphate mining lands, the concerns may also bolster the efforts of some residents to win financial compensation from phosphate companies that allegedly contaminated their drinking water with radioactive materials, sources say.

Florida Lawsuit

In one case, Florida residents Charlie and Kimberly Gates are suing Mosaic, along with W.R. Grace & Co., Seminole Fertilizer Corporation and Cargill Fertilizer Inc., in connection with a phosphate mining and processing facility that allegedly polluted the private drinking water well connected to their former home in Bartow, FL, ultimately causing Charlie Gates to contract leukemia. The suit, which was also filed in the U.S. District Court for the Middle District of Florida, seeks damages for personal injuries, economic losses and property damages in excess of \$75,000, the “exact amount of which will be proven at trial.”

For evidence, the suit relies in part on a 1988 report contracted by W.R. Grace indicating that the amount of radioactive contamination in Gates’ well exceeded EPA’s maximum contaminant levels (MCLs) for drinking water. According to the report, gross s-alpha levels in the well were 59 picocuries per liter (pCi/L) and the total radium levels were 18.3 pCi/L. EPA’s MCLs are 15 pCi/L for gross s-alpha radionuclides and 5 pCi/L for total radium, the suit notes.

According to the suit, the W.R. Grace report is evidence “each of the Operating Defendants knew or should have known that the operation of the Bartow Fertilizer Plant had resulted in and was continuing to cause contamination of the water, soil and air on Mr. Gates’ property.” Mosaic and Cargill deny they “caused any contamination that injured the Plaintiffs or that they are entitled to the requested relief,” according to court documents. The court has stayed the case against W.R. Grace while the company goes through bankruptcy proceedings.

A source familiar with the case says the fact that phosphate mining and processing practices at the time also caused environmental contamination to the extent that EPA also became concerned residents could be exposed to harmful levels of radiation further bolsters the suit’s contention that the companies “knew or should have known” about potential exposures. The agency was concerned about

residential exposures to radiation on former phosphate mining lands as early as 1979, according to one EPA study highlighted in the *Inside EPA* article, the source notes.

It remains unclear, however, whether and how the cleanup policy dispute between EPA and Florida state officials that has delayed efforts to address the ongoing residential exposures on former phosphate mining lands for decades will be resolved. EPA has listed many of the former phosphate mining lands in central Florida -- including W.R. Grace's former "Bonny Lake Mine," located adjacent to the Bartow Fertilizer Plant at issue in the Gates lawsuit -- in its Superfund database since 1979, but it is unclear at which of the sites the agency has exposure concerns. According to the database, many of the sites, including the Bonny Lake Mine, are still in need of an expanded site inspection.

In 2006, EPA had planned an aerial survey aimed at better characterizing how much of the land in the region was contaminated and to what extent, but a former EPA official says the survey was postponed as a result of the cleanup policy dispute, and, according to a Florida source, the agency has yet to reschedule.

The traditional EPA cleanup standard dictates that concentrations of radioactive radium-226 in contaminated soil on the former phosphate mining lands should not exceed 5 picocuries per gram (pCi/g) of soil, according to a 2006 internal concept paper the federal Agency for Toxic Substances & Disease Registry (ATSDR) developed regarding the Florida situation that *Inside EPA* recently obtained.

But Florida officials consider the 5 pCi/g standard "overly conservative," and argue that no cleanup is necessary unless people are being exposed to more than 500 mrem of radiation per year, the ATSDR document says. Environmentalists and some EPA officials have long fought against proposals that suggest radiation limits as high as 100 and 500 mrem are sufficiently protective of public health.

An EPA spokesman said in January that the agency "and the state of Florida continue to work cooperatively on this important matter" but that selecting criteria to evaluate the situation "continues to be a key part of the discussion."

The EPA spokesman did not respond to a request for comment for this article. Staff for Sens. Bill Nelson (D-FL), George LeMieux (R-FL) and Rep. Adam Putnam (R-FL), who represents the Lakeland and Bartow areas where there are concerns about contamination from former mining sites, did not respond to multiple requests for comment. -- *Douglas P. Guarino*

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